Search History / Note

(FILE 'HOME' ENTERED AT 10:42:33 ON 18 NOV 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, AGRICOLA' ENTERED AT 10:42:36 ON 18 NOV 2004

L1	763	S OLEOSIN OR CALEOSIN
L2	6	S L1 AND THIOREDOXIN
L3	6	DUP REM L2 (0 DUPLICATES REMOVED)
L4	104	S L1 AND FUSION
L5	63	S L1 (10N) FUSION
L6	39	DUP REM L5 (24 DUPLICATES REMOVED)
L7	32	S L6 AND OIL
L8	32	S L6 AND (OIL (2N) BODY)
L9	32	DUP REM L8 (0 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 10:45:27 ON 18 NOV 2004

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Field: **Title,** Limits: **Publication Date to 1997**

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- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

Search	Most Recent Queries	Time	Result
#7	Search **thioredoxin reductase gene** Field: **Title,** Limits: **Publication Date to 1997**	12:05:50	12
#6	Search **thioredoxin reductase** Field: **Title,** Limits: **Publication Date to 1997**	12:05:10	169
#5	Search **thioredoxin** Field: **Title,** Limits: **Publication Date to 1997**	12:04:54	700
#4	Search **thioredoxin** Field: **All Fields,** Limits: **Publication Date to 1997**	12:04:43	1316
#2	Search **1.8.1.9[EC/RN Number]**	11:53:36	0
#1	Search **1.8.1.9[EC/RN Number]** Limits: ignored	11:53:33	0

Clear History

	Type	Hits	Search Text	DBs
1	BRS	200	oleosin or caleosin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
2	BRS	17	(oleosin or caleosin) and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
3	BRS	3	((oleosin or caleosin) and thioredoxin) and emulsion	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
4	BRS	4	"6288304"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
5	BRS	2	"6372234"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
6	BRS	1	"6372234" and (oleosin or caleosin)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
7	BRS	0	"6372234" and ((oleosin or caleosin) and thioredoxin)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
8	BRS	2	"6288304" and ((oleosin or caleosin) and thioredoxin)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
9	BRS	4	"6288304" and (oleosin or caleosin)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
10	BRS	2	("6288304" and (oleosin or caleosin)) and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
11	BRS	28	(oleosin or caleosin) and emulsion	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
12	BRS	21	((oleosin or caleosin) and emulsion) and (food or personal or treat)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
13	BRS	9	(((oleosin or caleosin) and emulsion) and (food or personal or treat)) and pharmaceutical	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
14	BRS	2	"2002050289"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
15	BRS	238154	Van Rooijen, Gijs	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB

	Type	Hits	Search Text	DBs
16	BRS	18	Van and Rooijen and Gijs	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
17	BRS	0	WO0250289	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
18	BRS	21	"0250289"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
19	BRS	0	ZAPLACHINSKI near1 STEVE	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
20	BRS	10	deckers near1 harm	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
21	BRS	1942	METHODS AND PRODUCTION AND MULTIMERIC and PROTEINS AND RELATED and COMPOSITIONS	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
22	BRS	0	(METHODS AND PRODUCTION AND MULTIMERIC and PROTEINS AND RELATED and COMPOSITIONS).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
23	BRS	3955388	(METHODS FOR THE PRODUCTION OF MULTIMERIC PROTEINS, AND RELATED COMPOSITIONS).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
24	BRS	178	van near1 rooijen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
25	BRS	14743	pharmaceuticals near5 cosmetics	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
26	BRS	14	(pharmaceuticals near5 cosmetics) and oleosin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
27	BRS	133	oil near3 body near3 protein	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
28	BRS	9	(oil near3 body near3 protein) and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
29	BRS	1913	oil and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
30	BRS	14	oil near5 thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
31	BRS	14	oil near10 thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB

	Type	Hits	Search Text	DBs
32	BRS	2	"6531648"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
33	BRS	1	"6531648" and oil	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
34	IS&R	4	(("5683740") or ("5613583")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB
35	BRS	0	((("5683740") or ("5613583")).PN.) and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
36	BRS	3259	oil near1 body	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
37	BRS	292	oleosin or caleosin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
38	BRS	29	(oleosin or caleosin) and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
39	BRS	23	(oil near1 body) and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
40	BRS	42	(oil near1 body) and (allergen or allergenic or allergenicity)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
41	BRS	75	(oil near1 body) and (allergen or allergenic or allergenicity or allergic)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
42	BRS	45063	l1near15 (allergen or allergenic or allergenicity or allergic)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
43	BRS	20	(oil near1 body) near15 (allergen or allergenic or allergenicity or allergic)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
44	BRS	4	"9612799"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
45	BRS	3122	thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
46	BRS	50	thioredoxin and (oleosin or caleosin or (oil near2 body) or (lipid near2 body) or oleosome or spherosome)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB

	Type	Hits	Search Text	DBs
47	BRS	2509	thioredoxin and fusion	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
48	BRS	411	thioredoxin near5 fusion	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
49	IS&R	4	(("5831049") or ("5952034")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB
50	BRS	2	((("5831049") or ("5952034")).PN.) and fusion and thioredoxin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
51	BRS	2078	thioredoxin and fusion and heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
52	BRS	33945	thioredoxin near10 fusionnear10 heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
53	BRS	18	thioredoxin near10 fusion near10 heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
54	BRS	4	caleosin and oleosin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
55	BRS	7785	oil near2 body	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
56	BRS	44	oleosin and emulsion	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
57	BRS	291	oleosin	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
58	BRS	268	oleosin and (cdna or dna or cloning)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
59	BRS	3	(oleosin and (cdna or dna or cloning)) and (safflower near2 cell)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
60	BRS	37	(safflower near2 cell)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
61	BRS	6	safflower near10 transformation	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
62	BRS	10721	safflower	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB

	Type	Hits	Search Text	DBs
63	BRS	2	safflower and heterolgous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
64	BRS	422	safflower and heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
65	BRS	0	safflower near heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
66	BRS	3	safflower near10 heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
67	BRS	3	safflower near15 heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
68	BRS	9	safflower near15 recombinant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
69	BRS	64641	host near1 cell	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
70	BRS	7	(host near1 cell) near15 safflower	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
71	BRS	788	Carthamus near1 tinctorius	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
72	BRS	0	(Carthamus near1 tinctorius) near10 (host near1 cell)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
73	BRS	0	(Carthamus near1 tinctorius) near10 transformation	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
74	BRS	0	(Carthamus near1 tinctorius) near10 heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
75	BRS	10721	safflower	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
76	BRS	1531	safflower and protein and production and cell	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
77	BRS	397	(safflower and protein and production and cell) and heterologous	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
78	BRS	371	((safflower and protein and production and cell) and heterologous) and recombinant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB

	Type	Hits	Search Text	DBs
79	BRS	22	"5530186"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
80	BRS	11	"6146645"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
81	BRS	248	oleosin and soybean	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
82	BRS	268	oleosin and (cdna or dna or cloning or cloned)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
83	IS&R	4	(("6372234") or ("6183762") or ("6146645")).PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
84	BRS	20	"5792922"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
85	BRS	3	"9320216"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
86	BRS	47	"5650554"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB
87	IS&R	2	("5650554").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB

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AN 2004:36653 AGRICOLA

DN IND43636605

TI Method for bacterial expression and purification of sesame cystatin via artificial **oil bodies**.

AU Peng, C.C.; Shyu, D.J.H.; Chou, W.M.; Chen, M.J.; Tzen, J.T.C.

AV DNAL (381 J8223)

SO Journal of agricultural and food chemistry, p. 3115-3119
ISSN: 0021-8561

NTE Includes references

DT Article

FS Other US

LA English

AB A method was developed for production of sesame cystatin, a thermostable cysteine protease inhibitor. Sesame cystatin was first expressed in Escherichia coli as an insoluble recombinant protein fused to oleosin, a unique structural protein of seed **oil bodies**, by a short hydrophilic linker peptide. Stable artificial **oil bodies** were constituted with triacylglycerol, phospholipid, and the insoluble **oleosin**-cystatin **fusion** protein. After centrifugation, the **oleosin**-cystatin **fusion** protein was exclusively found in the artificial **oil bodies**. Proteolytic cleavage with papain, a cysteine protease effectively inhibited by cystatin, separated soluble cystatin from oleosin that was firmly embedded in the artificial **oil bodies**. After recentrifugation, papain that coexisted with cystatin in the collected supernatant was denatured by incubating at 55 (degree)C for 30 min. The insoluble denatured papain was removed by one more centrifugation, and the expressed cystatin of high yield and purity was harvested simply by concentrating the ultimate supernatant. Comparable inhibitory activity toward papain was observed between the expressed cystatin and the native one purified from sesame seeds. This method is presumably applicable to production of other protease inhibitors whose target proteases are economically available.

L9 ANSWER 24 OF 32 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1996:717365 CAPLUS
DN 126:44366
TI **Oil bodies** of transgenic Brassica napus as a source of immobilized β-glucuronidase
AU Kuehnel, Blanka; Holbrook, Larry A.; Moloney, Maurice M.; van Rooijen, Gijs J. H.
CS Department Biological Sciences, University Calgary, Calgary, AB, T2N 1N4, Can.
SO Journal of the American Oil Chemists' Society (1996), 73(11), 1533-1538
CODEN: JAOCA7; ISSN: 0003-021X
PB AOCS Press
DT Journal
LA English
AB The process of immobilizing enzymes is a major cost factor in the utilization of heterogeneous catalysts on an industrial scale. We have developed a new strategy, based on plant genetic manipulation, for the production of foreign peptides associated with the **oil body** in plant seeds. Seeds of transgenic rapeseed can be produced on a large scale at relatively low cost. Furthermore, **oil bodies** are readily isolated from seeds by flotation centrifugation. In this paper, we describe some phys. and operational properties of an **oil body**-fusion protein complex and its suitability as a heterogeneous catalyst. **Oil bodies** from rapeseed, corn, and flax aggregate at pH 5, which facilitates their recovery by flotation. **Oil bodies** from transgenic rapeseed, carrying the reporter gene β-glucuronidase or the pharmaceutical peptide, hirudin, also aggregate in the same range. This aggregation is reversible. **Oil bodies** are resistant to a wide range of pH, with some lysis occurring (<10%) at the extremes. They are resistant to shearing forces, such as stirring. The thermal and pH stabilities, as well as the catalytic activity of β-glucuronidase expressed on the **oil body** surface, are comparable to those of free β-glucuronidase enzyme.

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AN 97:15352 AGRICOLA

DN IND20550053

TI Production of biologically active hirudin in plant seeds using oleosin partitioning.

AU Parmenter, D.L.; Boothe, J.G.; Rooijen, G.J.H. van.; Yeung, E.C.; Moloney, M.M.

CS University of Calgary, Calgary, Alberta, Canada.

AV DNAL (QK710.P62)

SO Plant molecular biology, Dec 1996. Vol. 29, No. 6. p. 1167-1180
Publisher: Dordrecht : Kluwer Academic Publishers.
CODEN: PMBIDB; ISSN: 0167-4412

NTE Includes references

CY Netherlands

DT Article

FS Non-U.S. Imprint other than FAO

LA English

AB A plant oleosin was used as a 'carrier' for the production of the leech anticoagulant protein, hirudin (variant 2). The **oleosin**-hirudin **fusion** protein was expressed and accumulated in seeds. Seed-specific expression of the **oleosin**-hirudin **fusion** mRNA was directed via an Arabidopsis **oleosin** promoter. The **fusion** protein was correctly targeted to the **oil body** membrane and separated from the majority of other seed proteins by flotation centrifugation. Recombinant hirudin was localized to the surface of **oil bodies** as determined by immunofluorescent techniques. The **oleosin**-hirudin **fusion** protein accumulated to ca. 1% of the total seed protein. Hirudin was released from the surface of the **oil bodies** using endoprotease treatment. Recombinant hirudin was partially purified through anion exchange chromatography and reverse-phase chromatography. Hirudin activity, measured in anti-thrombin units (ATU), was observed in seed **oil body** extracts, but only after the proteolytic release of hirudin from its oleosin 'carrier'. About 0.55 ATU per milligram of **oil body** protein was detected in cleaved **oil body** preparations. This activity demonstrated linear dose dependence. The **oleosin fusion** protein system provides a unique route for the large-scale production of recombinant proteins in plants, as well as an efficient process for purification of the desired polypeptide.

L9 ANSWER 27 OF 32 MEDLINE on STN
AN 96191283 MEDLINE
DN PubMed ID: 8616216
TI Production of biologically active hirudin in plant seeds using oleosin partitioning.
AU Parmenter D L; Boothe J G; van Rooijen G J; Yeung E C; Moloney M M
CS Department of Biological Sciences, University of Calgary, Alberta, Canada.
SO Plant molecular biology, (1995 Dec) 29 (6) 1167-80.
Journal code: 9106343. ISSN: 0167-4412.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199606
ED Entered STN: 19960620
Last Updated on STN: 19960620
Entered Medline: 19960613
AB A plant oleosin was used as a 'carrier' for the production of the leech anticoagulant protein, hirudin (variant 2). The **oleosin**-hirudin **fusion** protein was expressed and accumulated in seeds. Seed-specific expression of the **oleosin**-hirudin **fusion** mRNA was directed via an Arabidopsis **oleosin** promoter. The fusion protein was correctly targeted to the **oil body** membrane and separated from the majority of other seed proteins by flotation centrifugation. Recombinant hirudin was localized to the surface of **oil bodies** as determined by immunofluorescent techniques. The **oleosin**-hirudin **fusion** protein accumulated to ca. 1% of the total seed protein. Hirudin was released from the surface of the **oil bodies** using endoprotease treatment. Recombinant hirudin was partially purified through anion exchange chromatography and reverse-phase chromatography. Hirudin activity, measured in anti-thrombin units (ATU), was observed in seed **oil body** extracts, but only after the proteolytic release of hirudin from its oleosin 'carrier'. About 0.55 ATU per milligram of **oil body** protein was detected in cleaved **oil body** preparations. This activity demonstrated linear dose dependence. The **oleosin fusion** protein system provides a unique route for the large-scale production of recombinant proteins in plants, as well as an efficient process for purification of the desired polypeptide.

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L1	8	thioredoxin near10 cosmetic	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/11/18 16:25	
2	BRS	L2	50	thioredoxin near10 antioxidant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/11/18 16:26	
3	BRS	L3	15	thioredoxin near10 pharmaceutical	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/11/18 16:27	
4	BRS	L4	63	thioredoxin near10 composition	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/11/18 16:33	

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
5	BRS	L5	36	thioredoxin near10 food	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/11/18 16:42	
6	BRS	L6	1918	thioredoxin and reductase	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/11/18 16:42	
7	BRS	L7	561	16 and cosmetic	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/11/18 16:42	